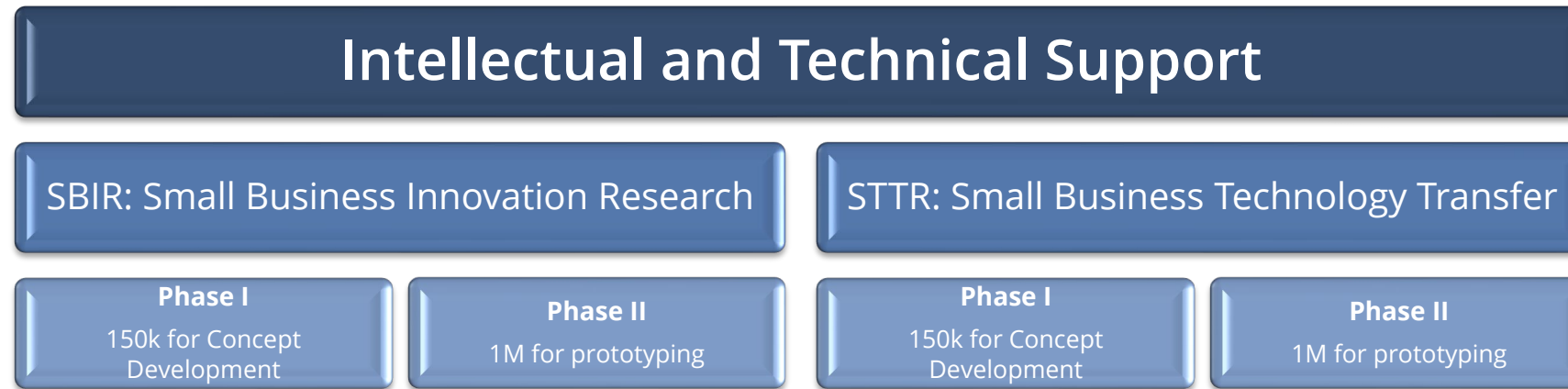


SBIR/STTR Engineering Research Center Collaboration Opportunity (SECO)

SBIR/STTR Engineering Research Center Collaboration Opportunity (SECO) Grant



- Commercialization between SBIR/STTR companies and ERC
- Up to 20% of Phase II award
- Needs to be **ACTIVE NSF** Phase II awardee
- PI cannot take more than 49.99%

SECO – Create Win/Win/Win

Win for Start-up

Address gap/need for next step after SBIR

Provides additional funding

Easy: 2-page proposal

Speed: Decision to award by PM – happen in 2-3 weeks

Timing: Address need NOW

Win for the (junior) PI

Collaboration with early-stage technology – possible publication(s)

Funding to pay for student/lab

Easy – 2-page proposal

Speed: Award and monies arrive in few months

Timing: Jr. PI's are strapped resources, can address right away

Win for ERC

Deep engagement with start-ups and window into innovative technologies

Support for PI's & students

Real Industry engagement (sponsored project)

Chance for deeper and long-term relationships

SECO – How to find

Active Phase II awardees

AWARDEES	TECHNOLOGY TOPIC AREAS	
14	Advanced Manufacturing (M)	▼
11	Advanced Materials (AM)	▼
4	Advanced Systems for Scalable Analytics (AA)	▼
9	Artificial Intelligence (AI)	▼
24	Biological Technologies (BT)	▼
35	Biomedical Technologies (BM)	▼
14	Chemical Technologies (CT)	▼

seedfund.nsf.gov/awardees/phase-2/

SECO – How to find

17 Digital Health (DH) ^				
COMPANY	LOCATION	AWARD ID	AWARD AMOUNT	AWARD DATE
Camerad Technologies, LLC	GA	1853142	\$759,942	05/14/2019
CONCHA INC.	CA	2154649	\$996,723	08/01/2022
DEEPCONVO INC.	PA	2213110	\$999,994	02/23/2023
Imagine Solutions Technology	AZ	2233743	\$975,040	06/12/2023
EVOLUTION DEVICES, INC.	CA	2153138	\$998,608	05/23/2022
HABITAWARE, INC.	MN	2026173	\$1,006,258	09/14/2020

SECO – How to find

Emagine Solutions Technology

SBIR Phase II: Improved Maternal Health with Predictive Patient Monitoring

PROJECT LEADER

Courtney Williams 

[\(520\) 485-9905](tel:5204859905) 

Principal Investigator

CONTACT

990 E CALLE DE LA CABRA

Tucson, AZ 85718--2929

NSF AWARD

2233743 – SBIR Phase II

AWARD AMOUNT TO DATE

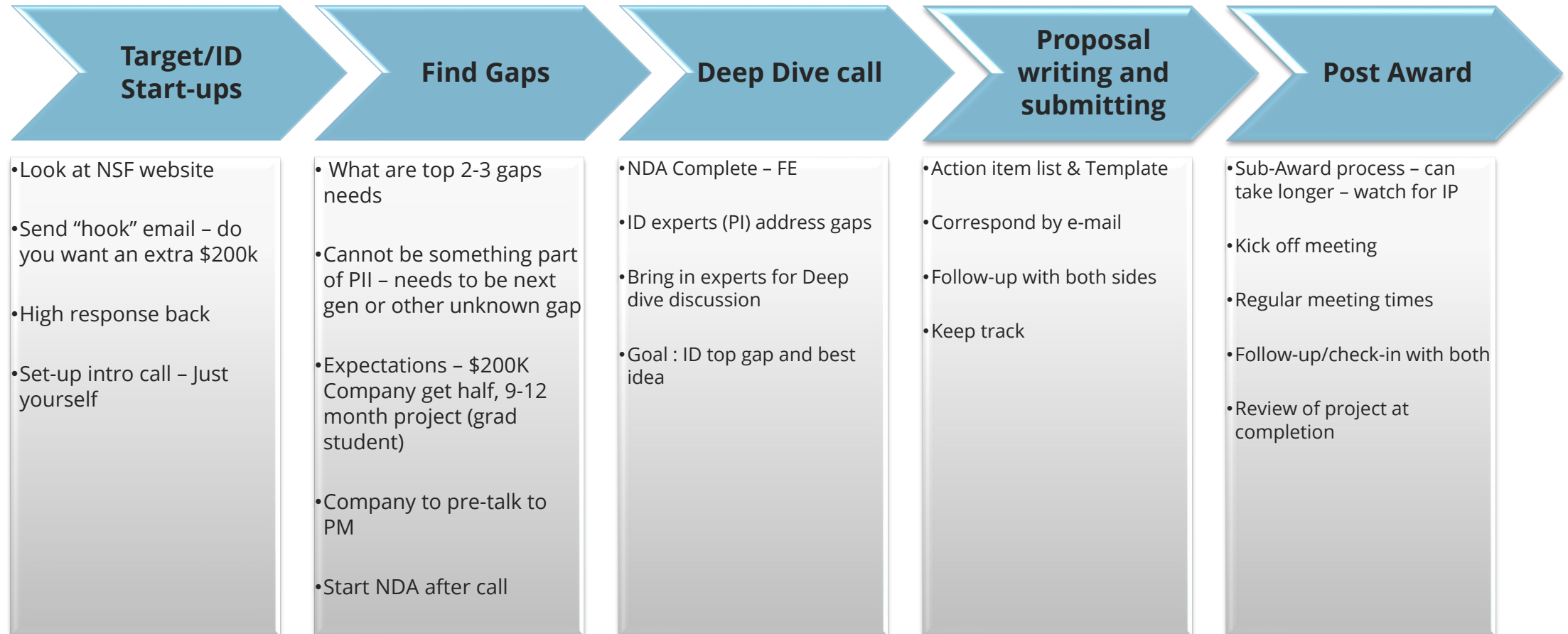
\$975,040

ABSTRACT

The broader impact/commercial potential of this Small Business Innovation Research (SBIR) Phase II project is to develop further a predictive model for health providers to address the life-threatening condition of preeclampsia in pregnant and postpartum patients. Preeclampsia affects 1 in 20 births, or 150,000 women in the U.S. each year. Not only does Preeclampsia cost 70,000 lives globally each year, it is also an expensive burden for healthcare systems. It costs nearly three times more to treat a patient with preeclampsia than one without this complication. When deployed at scale, the technology proposed in this SBIR grant could be a key factor to reducing maternal mortality in the United States, improving obstetric patient outcomes, reducing the cost of obstetric care, and helping to reduce health disparities.

The proposed project will research and develop a method to potentially detect preeclampsia. Preeclampsia is a hypertensive disorder of pregnancy. This dangerous condition also costs the U.S. healthcare system \$2.18 billion per year or one-third of the total amount spent on maternal healthcare in our country. Research objectives include optimizing a machine learning model, integrating patient-facing software into Electronic Health Records systems, implementing the predictive model for preeclampsia, integrating with peripheral wellness devices, developing reminder

SECO – Processes



SECO – Action Item List

#	Description	Personnel Responsible	Due Dates
1.	Letter of endorsement from the ERC center director	Director	12/30/22
2.	Executive summary from the SBIR/STTR Phase II grantee (No more than 1-2 pages)	Company	12/30/22
3.	Budget and budget justification from Institution (max 49.9% of total SECO funds)	PI	12/30/22
4.	Budget and budget justification from Company	Company	12/30/22
5.	Research Task 1 (Company):	Company Page limit 1	12/30/22
6.	Research Task 2 (Institution):	Institution Page limit 1	12/30/22
7.	Biosketch, NSF style, template attached	PI	12/30/22

SECO – Template

Project Title

We propose a SECO supplement grant for the collaboration of (Company) and PATHS-UP to benefit both the mission of PATHS-UP and the commercial potential of (Company).

(Company)

(Company) is helping to

Precise Advanced Technologies and Health Systems for Underserved Populations

PATHS-UP is an Engineering Research Center funded by NSF and founded in 2017. PATHS-UP's vision is to change the paradigm for the health of underserved populations by developing revolutionary and cost-effective technologies and systems at the point-of-care. The initial PATHS-UP technologies and systems are designed to help with chronic diseases such as diabetes and cardiovascular disease, which are leading causes of morbidity and mortality.

Goal

In this SECO proposal, we plan to integrate/develop/other (Company) ... technology with ... being developed within PATHS-UP. In addition, we plan to develop

Value of work to (Company)

Many of the markets that (Company) is targeting are ... This work will allow....

PATHS-UP has expertise in ... and will use this knowledge to apply

The combination will....

Value of work to PATHS-UP

Current point-of-care (POC) technologies are not always designed with the end user and system stakeholders in mind. A fundamental challenge in the development of low-cost POC is developing the user interface and the utility from the physician side in terms of their workflow... The development of ... for (Company) will also enhance our stakeholder engagement ...

Work plan

The supplement will focus the initial proof of concept

We will use

In addition to the ..., we will use

Research Task 1

Develop and implement

Research Task 2

Design....